# CLASSIFICATION

THIS DOCUMENT IS CLASSIFIED TOP SECRET BY DIRECTION OF THE CHIEF OF STAFF, USAF, AND DISSEMINATION WILL BE CONTROLLED ON A STRICT, INDIVIDUAL "NEED-TO-KNOW" BASIS AS OFFICIALLY ESTABLISHED FOR THE IDEALIST, KEDLOCK AND EARNING PROGRAMS.

\*USAF Declassification/Release Instructions On File\*

# TABLE OF CONTENTS

Briefing Charts	1
ASD/R&T Support Areas	2
AFSC Smokey Joe Support Projects	3
Program Data - Aircraft	4
Program Data - Engines	5
Logistic Status	6
U-2 Reliability	7
Minorest Status & Accident History	8

TAB

# SPO OPERATION

# ORGANIZATION

January 1956 by direction SAF

Present Manning - 5 ASD:

Chief Engineers (2) Production Specialist Secretary

#### **RESPONSIBILITIES**

Normal AFR 375-1 functions without staff participation

Total system management (Cradle-to-Grave):

Engineering/Dev. - Maint. - In-Service Logistics Management (Black and White) AFPR Functions/QC Fiscal Management/Common Funding Special Contracting Procedures/Support Special Security Data Configuration Management Reliability/Maint/V.E.

Interagency/Industrial Support

# Management Concept:

Minimum personnel/maximum experience
Maximum Direct Contact
Mutual trust
Minimum paper
Authority and Responsibility Lowest possible level
Red Line Channels

#### Procedures:

Program, obtain and manage SAF funds for all contracts and supply support

Direct mail and communication channels

Single point contacts

No local Reps cleared (No plant reps)

Use lab personnel as required (oxygen, fuels, survival)

WSSC - WRAMA under SPO control

Project Dragon Lady/1-13 precedence

AFLC Project Officer

Engines Thru ASD

Diviations as required

STAT

#### BRIEFING NOTES

# SPO OPERATION

o Security I-3 and K-3 required.

#### **ORGANIZATION**

- o Same for "E"
- o Dragon Lady personnel integrated to "E" & "K"
- o No management change directive for any program.

#### RESPONSIBILITIES

AFR 375 Functions - Use only those staff personnel making direct contribution.

- o Timely action by known productive personnel.
- o Clear only those needed for specific actions.

# TOTAL MANAGEMENT.

- o Cradle-to-grave same for "E".
- o SAC Ops orders and comm channels same 8 years.

  (SAC people different constant education process)
- Based on previous directives.

#### Engineering.

- o Development see list of established ASD, RTD, AFLC, JAG, DSA support areas.
- o Best specialists used. Some now in management positions.
- o Same used in production, maintenance engineering and inservice engineering areas.

# Logistic Management.

o Total - more later.

# AFPR Functions - (All)

- o ACO, QC, security, industrial support, facilities, tooling, FCR's, bailment actions.
- o Acceptance? DD 250's
- o Inspection

# Fiscal Management

- o Source of money Washington, SAF or DCS System & Logistics
- o To project, depot or WP for engines or GFAE.
- o No year originally
- o Annual release Semi-annual obligation authority; 5 yr planning.
- o Monthly report to comp. U/SAF
- o Engines justify, GET and Follow-up MIPR action, <u>Phila ASO</u>
  Navy w/deviations. 6-8 mos behind contractor reports to
  SPO. <u>COVER</u> all programs.

#### Fiscal Mgmt

o Common funding, Ratio, different all contracts, based on judgement, issue rates and resource allocation, SAF approved (same fund source).

# Special Contracting

- o Agreements
- o How is it done?

Requirement
Work statement and specification
Contractor selection
New contractor problems
Contract review
AFPI's and ASPR's
Travel and teamwork

# Support

- o Cover
- o Banking
- o Imports
- o Tax support

# Special Security

- o Cells
- o Responsibility
- o Few know
- o Future capability

# Data

- o Handbooks and manuals standard format
  - o 7700 notes
  - o Commercial practice & vendor manuals
  - o Min cost
  - o Limited distribution
  - o Up-dated semi-annually
  - o Interim changes (TOC's)
  - o T.O. Info special channels.
- o Min reports SPO only

#### Configuration Management

- o Base line established early
- o All changes controlled by SB BR ECP
- o S/B's advanced cys to depot thence SPO, SAC Hq and unit.
- o Ten day approval/disapproval
- o Approval SAC to unit, SPO to depot/contractor
- o Kits to depot, distributed by tail number
- o Monthly report to SPO
- o Joint ECP's & SB's
- o Real cost considerations
- o Change philosophy same as all fly safe

# Reliability/Maintainability/V.E.

- o Total Rel. Later
- o Monthly letter & reports from DCM
  - o Manhours each system
  - o Scheduled & unscheduled maint.
  - o Big ten items +
  - o Letters from tech reps
    - o "B" 100,000 cycle 328,000 cycles
    - o T 2 years
- o Autopilot, sextant, J-8 attitude ind., ARC-34, 618T-3814B, altimeters.
- o Big 'R' suggestions
- o Complex work areas, mission, downtime & cost preclude doint everything command desires.
- o V.E. everyone charged with responsibility

# Interagency/Industrial Support

o See list - COVERS ALL, AF & Project activities.

# MANAGEMENT CONCEPT

# Min Personnel/Max Experience

- o Sec & Chief changed in 7 years
- o All previously proven SPO workers
- o Do much more than job description

#### Max Direct Contact

- o Know key people in cell
- o Travel shared w/contractors

# Mutual Trust

- o Experience to date excellent
- o No fee on many items
- o Squeeze when required
- o No frills, cars, pictures, models
- o No surprises

# Minimum Paper

- o One page ECP's (why?) no surprises
- o Five four drawers for first six years
- o Essential paper catches up.

# Authority and Responsibility Lowest Possible Level.

- o AFLC, WRAMA, ASD General officer level seldem approached for assistance.
- o Open door policy of key personnel
- o J. Wilson (example)

# Red Line Channels

o AFIGO-S - U/SAF - COS - SEC DEF (JCS when reqd)

# **PROCEDURES**

# Program, Justify, Obtain and Manage SAF Funds.

- o All contracts
- o Supplies
- o Support

# Direct Mail and Comm Channels

- o P.O. Box
- o Teletype (secure)

# Single Point Contacts

- o SAC
- o Contractor
- o USAF, OPNS, Supply, Maint., AFLC,

STAT

# No Local Reps

- o Limit interference
- o No company knowledge

# Max use best lab personnel

o See list

# WSSC-WRAMA under SPO Control

- o AFLC chiefs, supply and maintenance & Cmdr briefed
- o Me special projects civilian
- o WRAMA Cmdr and Dir Supply (Civ Cotton) since beginning
- o Not first complaint (cotton)
- o Dragon Lady 1-13 precedence
- o Termination account
- o Philosophy of Opns last a/c last part
- o Real cost

# Engine Procurement and Support

o Project - AF Mix.

# DEVIATION

- o Auth: COS USAF
- o Interest timely action and security
- o Accident reporting AFR 127-4
- o AFM 66-1
- o Industrial security rqmt

Approved For Rejeaspm2002/09631244BDR38-02415Ag0920019090612 ty.

STAT

# SYSTEM DESCRIPTION

# AIRCRAFT

Single place, long range, high altitude, special purpose.

# WING

Area - 600 Sq Span - 80 Ft Aspect Ratio - 10.67

# LANDING GEAR

Bicycle Type Droppable Wing Pogos Fixed Tip Skids

INTERCHANGEABLE WING PODS ARS

FUSELAGE LENGTH: 50 Ft

DESIGN GROSS WEIGHT: 17,750 1b.

PRESENT GROSS WEIGHT: 20,600 1b

EMPTY WEIGHT: 11,400 lb.

DESIGN MISSION EQUIP WEIGHT: 450 1b.

PRESENT MISSION EQUIP WEIGHT: 640 1b.

ENGINE - P&W J-57-P31-A - 11,200 lb thrust

STAT Approved For Release 2002/09/03 : CIA-RDP33-02415A000200190006-2 Next 1 Page(s) In Document Exempt

# SAC AIRCRAFT OPERATIONS

ISSION			

MISSION	
(U) Provide upper air meteorological data in support of geophysics research through-out western hemisphere	
	STAT
(S) Maintain state of readiness and EWO capability for world-wide reconnaissance	
LOCATIONS - Davis Monthan AFB	
4 permanent detachments 2 roving detachments	
MISSION EQUIPMENT - 13 Operational Aircraft	
PHOTO - 13 A/C - 1 ea (all) 70MM x 1000' total flight line coverage	
A-1 Config 3 ea. 6" 9½ x 390' (650 x 3830 NM)  1 ea. 24" 9½" x 1800' (8.6 x 2260 NM) or (36 x 753  A-2 Config 3 ea. 24" 9½" x 1800; (36 x 2260NM)  B Config 1 ea. 36" 2 rolls 9½ x 6000' (750 x 2875 NM)	nm)
B Config 1 ea. 36" 2 rolls 9\frac{1}{2} x 6000' (750 x 2875 NM)  H Config 1 ea. 66" 5" x 2000' 600 target (1 Mi x 8 Mi)	STAT

# AFSC AIRCRAFT OPERATIONS

# MISSION

High altitude research platform (U)

# LOCATIONS

Edwards AFB - 3 detachments

# MISSION EQUIPMENT

4 aircraft (2 U-2As and 2 U-2Ds)

(1) (2) (3) (4) AFCRC equip for geophysics and weather research

ASD equip for infrared measurements
General R&D support to other government agencies
National HICAT investigation

# PROGRAM DATA - AIRCRAFT

THIRTY-FIVE (35) AIRCRAFT LESS GFAE AND ENGINES
INSTALLATION EQUIPMENT AND INITIAL SPARES
FY 58/59/60 program support
FY 61
FY 62
FY 63
FY 64
FY 65

Fiscal year support requirements includes support for research projects, aircraft and equipment modification, tech rep services, crash repairs and complete supply support less GRAE

#### CONTRACTS

# SPO CURRENTLY CONTROLLING 29 ACTIVE CONTRACTS

LOCKHEED
BAIRD-ATOMIC
PERKIN-ELMER
HYCON
FIREWEL
EASTMAN KODAK
PRATT AND WHITNEY
DAVID CLARK

**STAT** 

STAT

**STAT** 

SPO CURRENTLY SUPPORTING 256 CONTRACTS

# CURRENT LOGISTIC STATUS

# IRAN

--First 1000 hour IRAN (Jan 60 - Jun 61)
Input - 1 Aircraft every 2 weeks
Flowtime - 6 weeks
Modernize communication and navigation
Delete obsolete installations for weight savings
Modification for reliability and ease of maintenance

-Second 1000 hour IRAN (Jun 61 - Jul 63)
Input - 1 aircraft every 4 weeks
Flowtime - 8 weeks
Structural inspection for corrosion and fatique
Fuel tank inspection for fungus
Electrical system modernization
Improved long range communications
Aerial refueling system

-Third 1000 hour IRAN (Jul 63 - Mar 65)
Input - 1 aircraft every 4 weeks
Flowtime - 10 weeks
Rewire nose, wing and AFT section
Structural check for annealing and replace as required
New Auto-Pilot
New compass system
New cockpit
Canopy ejection
Update sextant

STAT

# CURRENT LOGISTIC STATUS

# MAINTENANCE

Field and	Unit maintenance performed by	SAC
	by contractor tech reps	

Depot maintenance by contractor

STAT

#### SUPPLY

WSSC organized for: Inventory control Quick reaction

Supported by Log Air
ACCP/NORS-G rate 2/10 of 1% for 64
Cannibalization rate - ZERO

# MAINTENANCE

MAIXIMUM BASE CAPABILITY TO EFFECT COMPONENT REPAIR

DIRECT TO CONTRACTOR FOR OVERHAUL

ROUTINE TURN AROUND RRACTICED:

On tracker approximately every 2 years On "B" approximately every 200,000 cycles On wheels every 10 tire changes

AVERAGE 24.6 MANHOURS OF MAINTENANCE REQUIRED PER FLYING HOUR

FLEET FLIGHT HOURS - 1000 per month .

# ACCIDENT HISTORY

SAC	PATAL 10	NON-FATAL	A/C LOST
AFSC	1	0	1

STAT

# FLIGHT TIME

Rate - 1000 hours per month Total - 106,000 hours December 1964 Time at Altitude - 80%

121,122 an Bon July 66

FUTURE	PLANS
1 0 7 0167	2 20 40 1

	1.
	2. Continue low rate ANFE and AOCP.
	3. Maintain EWO and "Open Sky" capability.
ţ	4. Continue to support SAC RTS and intelligence community, i.e., community buying of intelligence gathering devices.
:	5. Continued support of geophysics programs and prepare to STAT cover other research needs.
	6. Continue to manage special project procurements through community buying.
•	7. Maintain configuration discipline.
	8. Limit change to -
* '.	<ul> <li>a. flight safety.</li> <li>b. increased mission capability.</li> <li>c. significant maintenance manhours and dollar savings.</li> </ul>
	9. Provide liaison and technical support for future programs.
	10. Maintain responsive posture for total intelligence mission.
	11. Provide source economic discipline.
i	12.
	,

# PROBLEMS

- 1. BOMBER VERSUS RECONNAISSANCE OPERATIONAL PHILOSOPHY
- 2. INVENTORY DEPLETION/INCREASED COSTS
- 3. PERSONNEL TURNOVER/ATTRITION
- 4. PERSONNEL REWARDS

37	7	1.	Τ	

Approved For Release 2002/0	OWS · CIV DDD33 (	124454000200400006 2



ASD R&D AND PRODUCTION SUPPORT AREAS (Including Data)

# AERO MED - HUMAN FACTORS

Personnel Parachutes Parachute Rigging Parachute Hardware - Releases - Autotimers Furnished R&D Models of Paratimers Qual Testing Paratimers after Mod Speed Sensor Design Cartridge Actuated Devices (CAD) Qual Advise Ejection System Test Review Full Pressure Suit Oxygen System Bends - Devitragenation Oxygen System Freezing Tests Medical Doctor Furnished for Accident Investigations Arrange Physiological Training for both Military & Contractors (altitude indoctrination) Pressure Suit Q Limitations and Test Reports Pressure Suit Temp Limitations A/P 22 S-2 Full Pressure Suit (AF Std) Advise and Reports Partial Pressure Suits and Helmets Monitor Nuclear Flash Protection Program Survival Kit Survival Kit Components Oxygen System Hardware Seat Kit Testing for Qual Obtained Walk Around Sleeping Bay on loan. Ejection System Advise and Reports Frankfort Arsenal Liaison - Seat Analysis Accident Early U-2 Ejection System Design Approval

#### MATERIALS

High Temp Hyd Oils (Furn 200 gal) Specifications Testing Reports High Temp Grease and Lubricants Test Reports Development Reports Oxygen System Lubricants Oxygen System Sealants Oxygen System Materials Teflon !-Kal F High Temp Sealant Materials High Temp Bearings Corrosion Resistant Bearing Steel High Temp Wire Egliloy Wire Rope

# Approved For Release 2002/09/03 : CIA-RDP33-02415A000200190006-2 MATERIALS (Cont'd)

HT-1 Nylon High Temp Fiber Applications Fabroid Materials Induction Brazing Titanium Alloy Extrusions Fissuring in Stainless Steels Primary Working of Refractory Metals Fuels Elastomers Tires and Brakes Insulation Manufacturing Methods Hot Sizing Forging Oils Hydraulic Oils - High Temp Metal Fabrication Reports Dow Corning #7 - 02 Sys Lub High Temp Bearings and Greases Reports High Temp Lub Reports High Temp Electrical Eg Reports High Temp Fiber Application Reports High Temp Wire Reports Fabroid Materials Induction Brazing Furnace Brazing Titanium Alloy Reports Materials and Mfg Methods Fuels, Lubricants and Hydraulic Fluids Elastomers - Tires, Seals, Sealants, Insulation

#### COMMUNICATION AND NAVIGATION

Radar ASN-7 Data Link ARR-61 Dwgs and Rpts Star Trackers Inertial Nav Gyros - 2 ea loan for test APN-96 Wind Computer (Wea Pkg) APN-42 Radar Altimeter ARC-50 Flight Testing ARC-50 Reports Antenna Patterns Range Detectability KWM-1 618TAIC-10 ARN-31 ARN-41 AIC-18

# Approved For Release 2002/09/03: CIA-RDP33-02415A000200190006-2 COMMUNICATION AND NAVIGATION (Cont'd)

ASN-24 Sextant Problems 618T-1 Furn 1 ea R&D equip still in use 618T Reports, Specs, TO's, etc. ARC-51

#### RECON

Photo Image Motion Compensation Vibration Stabilization Processing

STAT

Lens

Mapping and Charting
Weather Pkg Components
Weather Pkg Design
Viewfinders
Controls
Antennas
Recce-Strike

# FLIGHT CONTROL

Accident Investigation
Control Analysis
Structure
Control Hardware
Instruments-Verticals (obtained on load for mockup)
Cockpit Lighting
Mach Switch 1 ea furn
Repair of Flight Recorder
Flight Recorder Chart Paper
Flight Instruments and Air Data Computer

# AIRCRAFT

Structure
High Temp Structural Design Reports
High Temp Strain Gauges
Aerodynamics
Flight Test Instrumentation
3 ea Electronic Strip Chart Recorders
4 ea Switch Units, Junction Box, etc
1 ea Circular Seals Indicator
VGH Recorder
Simulators

#### PROPULSION

Consultant
Fuel Selection
Fuel Specification
Fuel Qual
Oil Selection
Oil Specification
Oil Qual Testing
Engine Problems
Seal Problems
Fuel Control
AGE
Starters
Accessories
Engine

#### OTHER SPO'S

In-Flight Refueling Receptacles (from B-52 and B-58 spares)
X-15 Static Part Location Study Report
MA-1 Pitot Static Probe (from F-104 production line)
Flight Test Reports - B-58, F-100, F-106
Maintenance Handbooks - B-58, F-106
B-58 Envir. Vib Qual Tests
TO's on C-119J
X-15 Interim flight test pitot boom and head borrowed from NASA
thru X-15 SPO
Interface with RS-70 (Correlation and data)
Flight Simulators

#### PROCUREMENT AND GENERAL SUPPORT

- AFLC JAG Office Patent Applications, MCJP AFLC Maintenance (CTS Policy) MCMBC AFLC Maintenance (Handbook Policy AFLC Supply (Special Projects) ASTIA WPAFB Regional Office (Documents) WPAFB Data Supply - Mil Specs, Bulletins, Forms, Standards, Drawings, Regulations, Manuals, T.O.'s Numerous ASD Engineers - Technical Reports, Materials, etc. ASD Engine Buyer - J-57 and J-75 ASD GFAE Buyers and Project Engineers ASD GFAE Requirements and Distribution ASD Directorate of Production (Facilities Reqts Br)- Reverse Bailment Agreements ASD Directorate of Procurement - Contract Numbers Chair Packs ASD Industrial Resources Division - Material Priorities - Property Administration Defense Electronic Supply Center (Gentile) - Electronic Equipment and Data Various Contractor Representatives - General Information and Data ASD Dep Com/Test and Support (Test Equipment) ASD Engineering Contacts for Technical Reports, Materials, Equipment, etc. (1) Non-Metallic Materials Lab - Oil (2) Directorate of Advanced Systems Planning - Weather Packages
  - (3) Flight Dynamics Lab Weather Package Component Repair & Flt Recorder Chart Paper
  - (4) Directorate of Materiel Mgt & Integration Flight Operating Instructions
  - (5) Non-Mettallic Materials Lab Reports on Grease Lubricants
  - (6) Non-Metallic Materials Lab Reports on Lubricants
  - (7) Manufacturing Technology Lab Rpts on Titanium Alloy Extrusions and Rpts on Causes of Fissuring in Stainless Steels
  - (8) Metals and Ceramics Lab Rpts on Primary Working of Refractory Metals
  - (9) Manufacturing Technology Lab Rpts on Androforming on Material Properties
- (10) Non-Metallic Materials Lab Rpts on Hi Temp Resistant Sealant Materials
- (11) Flight Dynamics Lab Reports on Hi Temp Bearings
- (12) Metals and Ceramics Lab Rpts on Develop. of Corrosion Resist. Bearing Steel
- (13) Reconnaissance Lab Rpts on Optical Glass
- (14) Physics Lab Rpts on Thermophysical Properties of Solid Materials
- (15) Aerospace Medical Research Lab Rpts on Bends etc at Altitude
- (16) Applications Lab Rpts on Air Wpns Materials Application Hdbk on Metals and Alloys
- (17) Metals and Ceramics Lab Rpts on Plating Steel with Aluminum
- (18) Biomedical Lab Rpts on Bends and Denitrogenation at Altitude
- (19) Physics Lab Rpts on Properties of Thin Fins Magnetic Films
- (20) Directorate of Operational Support Rpt on Elgiloy Wire Rope
- (21) Directorate of Operational Support Rpts on Ejection Seat Components
- (22) Flight Accessories Lab Rpts on Hi Temp Wire

TAB

STAT

TAB

#### CONTRACTS

SPO	CURRENTLY	CONTROLLING	<b>2</b> 9	ACTIVE	CONTRACTS
	L	OCKHEED			
	В	AIRD-ATOMIC			
	P	erkin eimer			
,	Н	YCON			
	F	TREWEL			
	E	astman kodak			
	·	AVID CLARK			
					]
	· I	PRATT & WHITN	ΕY		

STAT

STAT

**STAT** 

SPO CURRENTLY SUPPORTING 256 CONTRACTS

TAB



STAT STAT

LOGISTICS	
Specialized Weapon Support Center established in support of training	STAT
Project - June 1955 SAC - "Dragon Lady" - June 1956	
SAC WSSC moved to Warner Robins June 1957 concurrent with 4080th move to Laughlin AFB, Texas.	
The two WSSC combined January 1961 at Warner Robins assuming total logistic responsibility with the exception of contracting.	
Non-standard procedures utilized:  Drawings and Publications are not IAW MIL Spec.  Materials & equipment are not formally catalogued or stock listed.  Contractual maintenance is utilized.  Secure type operations maintained.  Depot cleared personnel restricted to commander, one staff officer and participating personnel  Chain of command is from USAF, AFSC, WSSC	·
There are 13,800 peculiar non-standard items and 19,000 common stock listed items utilized in support of the Weapon System and related equipment.	
Current programed support capability provides for: Project-Home Station and 2 detachments SAC -Home Station and 5 detachments (exceeded by 1) AFSC -Home Station and 1 detachment	
Present operations and locations being supported:	
Project:  Home Station - Edwards - Project  Detachment H - Project  SAC:	STAT STAT
Home Station - Davis Monthan - Project "Dragon Lady"  Detachments -	STAT
AFSC:	
Home Station - Edwards, Project Detachment - Patrick AFB, Projec	STAT
Photo Processing Centers: Suitland Detachment H Viet Nam Slith Aerospace RTW, Offutt AFB. Barksdale AFB Westover AFB March AFB	

Approved For Release 2002/09/03 : CIA-RDP33-02415A000200190006-2

FTD

STATISTICS	<u>61</u>	<u>62</u>	<u>63</u>	<u>64</u>	65
Flying Hours	14000	14200	15100	12300	
Items Issued	53200	52698	53083	54412	
9₹ Film (10 <sup>6</sup> ft)	2.3	3.8	7•3	7•9	
Tons Processed (excluding engines)	1398	1258	1624	1713	

**STAT** 

**Next 1 Page(s) In Document Exempt** 

1.6 -- 1965

# HEADQUARTERS 4080TH STRATEGIC WING (SAC) UNITED STATES AIR FORCE DAVIS-MONTHAN AIR FORCE BASE, ARIZONA

15 January 1965

Lt Colonel Wayne Freas Wright-Patterson AFB, Ohio

Dear Wayne,

Colonel Des Portes just phoned stating you have to justify once again our extremely efficient Dragon Lady logistical support organization.

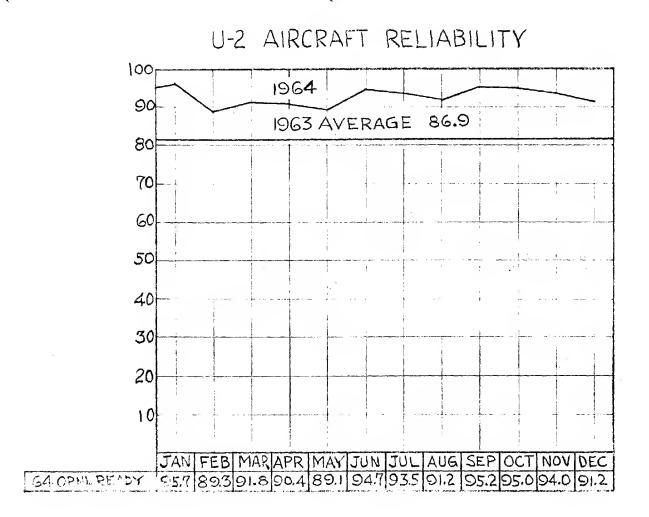
While the attached chart is being drawn, though! I would write this note to extend our offer for anyother information you might need.

Mr. Pittman and Mr. Packard spent yesterday with us securing information and being briefed by TSgt Ridley and myself. Believe they learned a lot, also believe they have much more to learn. Perhaps they should return. We will assist them at anytime.

Sincerely,

F. M. SHIPLEY Lt Colonel, USAF

**TAB** 



TAB